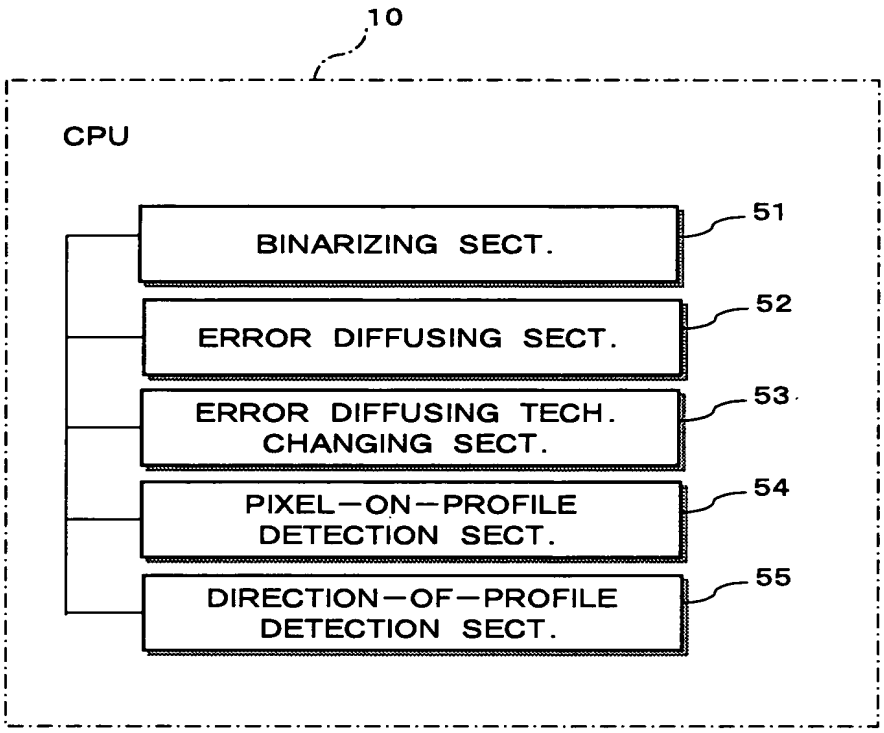
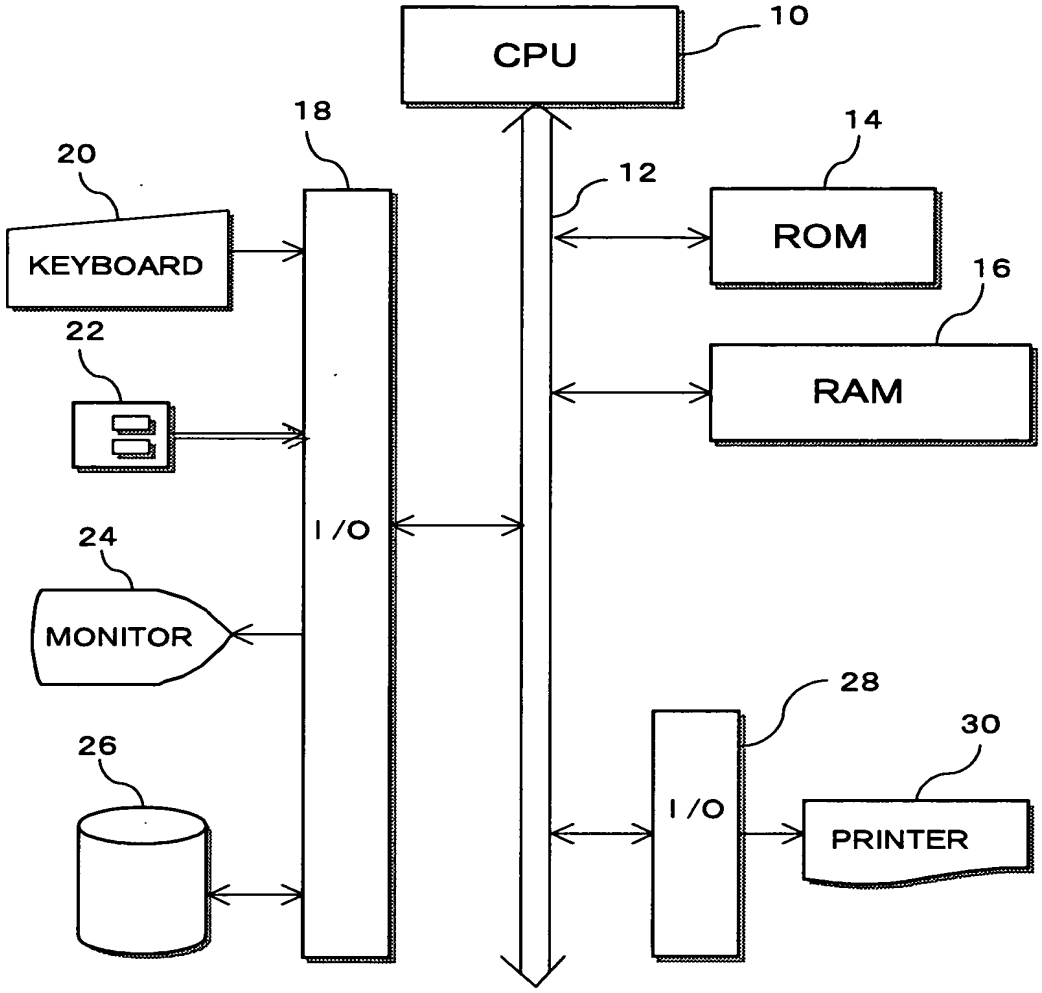
FIG. 1



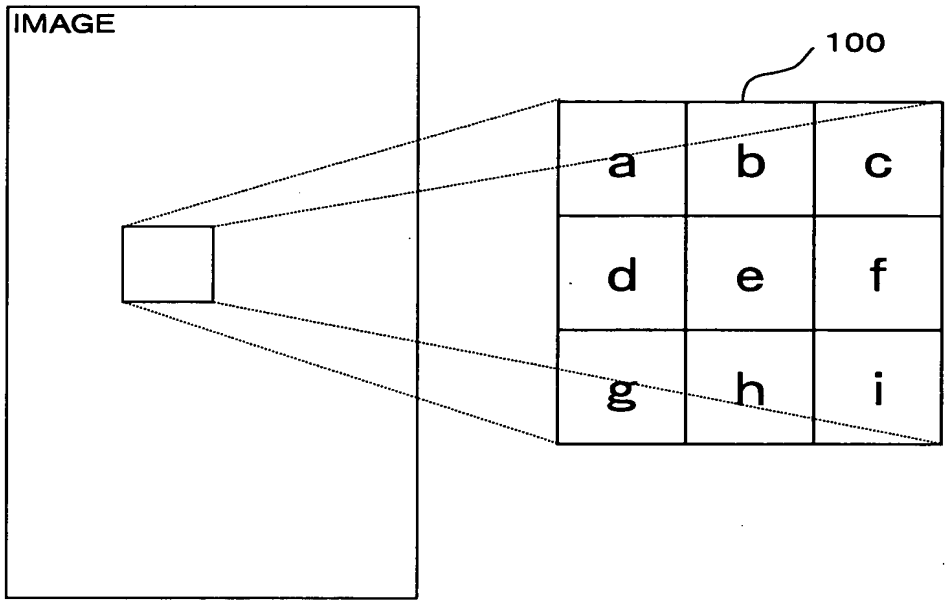
0960450-090200

FIG. 2



09657456 - 052200

FIG. 3



09624950.050200

FIG. 4

(a)

0	−1	0
−1	4	−1
0	−1	0

(b)

1	−2	1
−2	4	−2
1	−2	1

0656450-052200

FIG. 5

(a)

$$\sqrt{\left(\begin{array}{|c|c|c|}\hline 1 & 0 & -1 \\ \hline 1 & 0 & -1 \\ \hline 1 & 0 & -1 \\ \hline\end{array}\right)^2 + \left(\begin{array}{|c|c|c|}\hline 1 & 1 & 1 \\ \hline 0 & 0 & 0 \\ \hline -1 & -1 & -1 \\ \hline\end{array}\right)^2}$$

(b)

$$\sqrt{\left(\begin{array}{|c|c|c|}\hline -1 & 0 & 1 \\ \hline -1 & 0 & 1 \\ \hline -1 & 0 & 1 \\ \hline\end{array}\right)^2 + \left(\begin{array}{|c|c|c|}\hline -1 & -1 & -1 \\ \hline 0 & 0 & 0 \\ \hline 1 & 1 & 1 \\ \hline\end{array}\right)^2}$$

0566745 - 0566745

FIG. 6

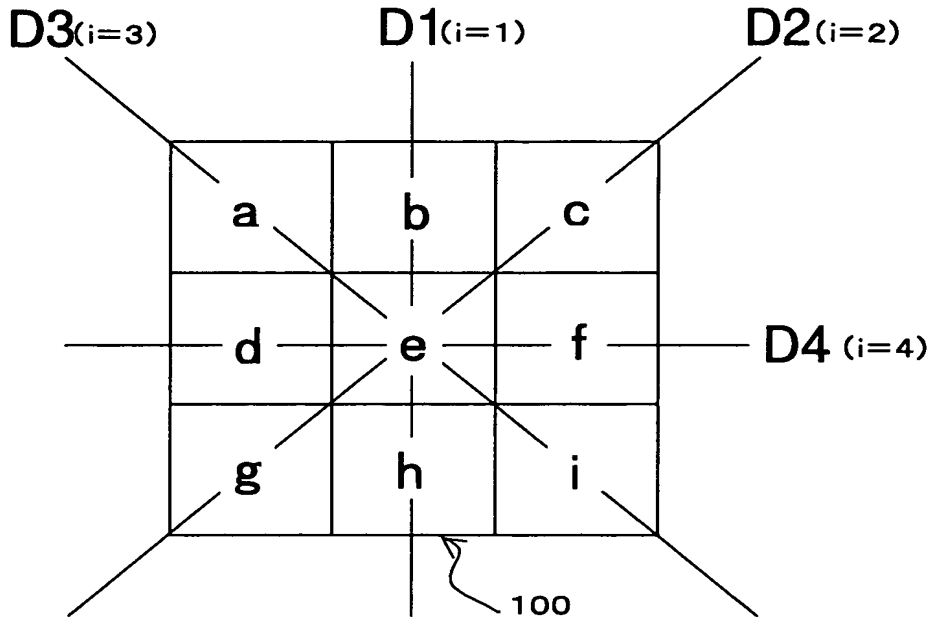


FIG. 7

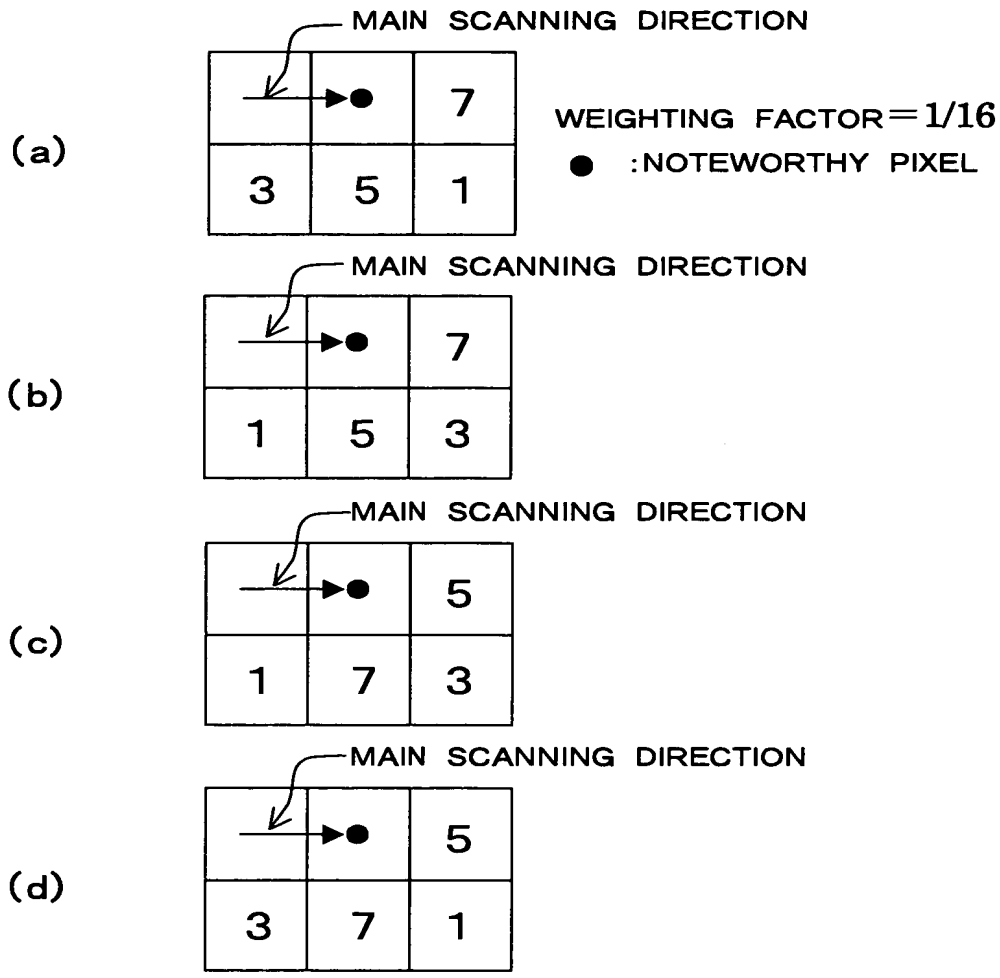

MAIN SCANNING DIRECTION
7
3 5 1
WEIGHTING FACTOR=1/16
● :NOTEWORTHY PIXEL
(a)
MAIN SCANNING DIRECTION
7
1 5 3
(b)
MAIN SCANNING DIRECTION
5
1 7 3
(c)
MAIN SCANNING DIRECTION
5
3 7 1
(d)

FIG. 8

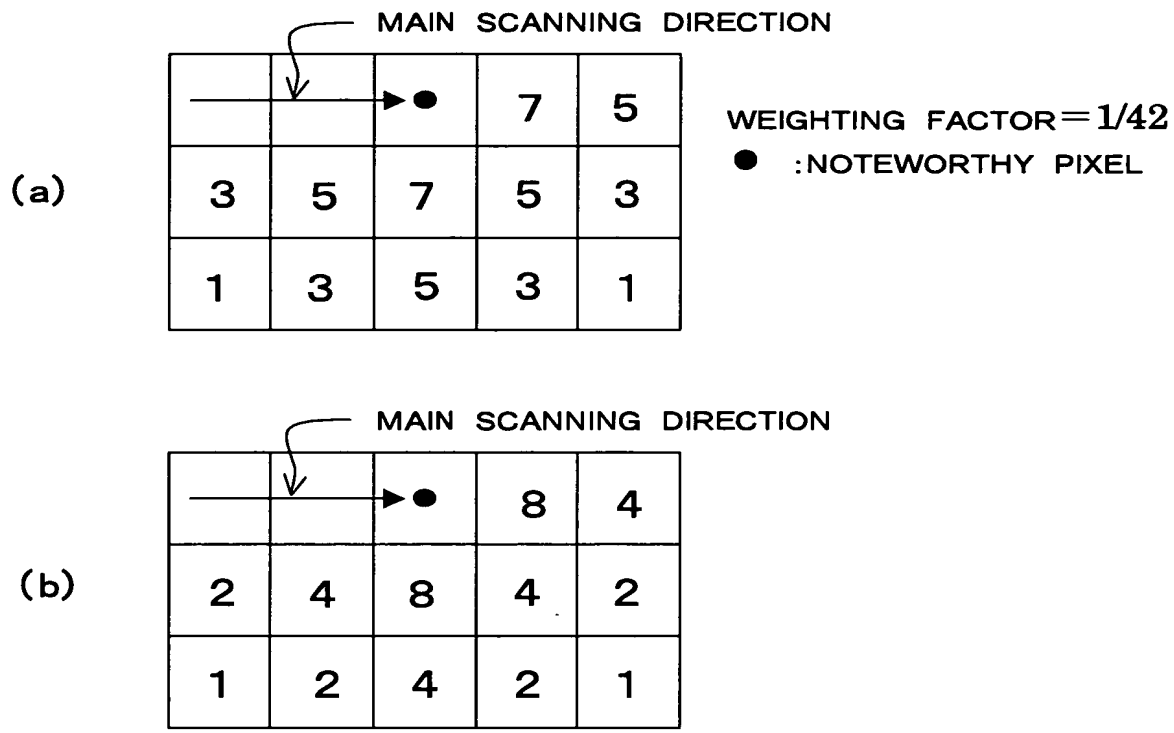
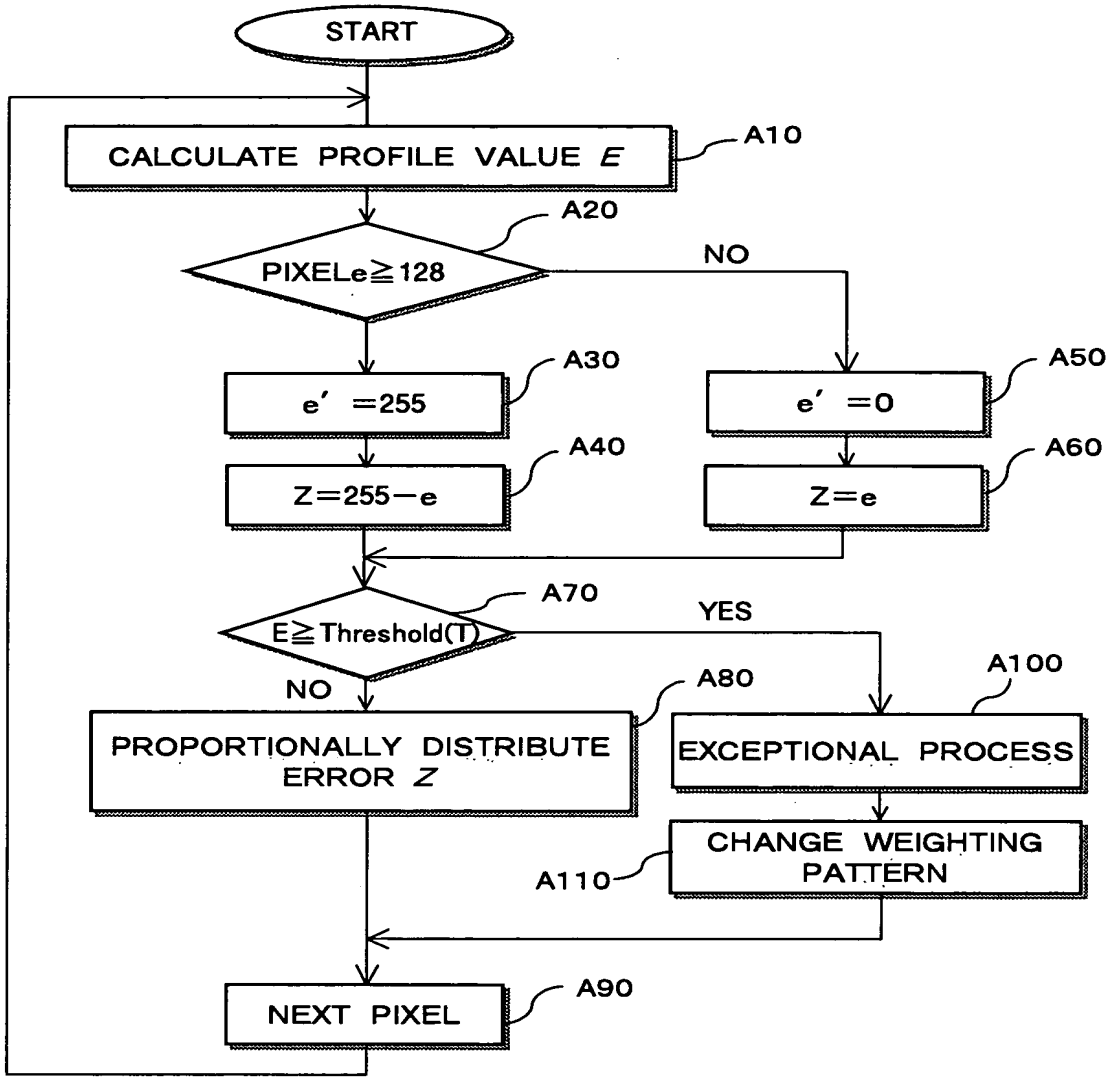

MAIN SCANNING DIRECTION
7
5
3
5
7
5
3
1
3
5
3
1
WEIGHTING FACTOR=1/42
:NOTEWORTHY PIXEL
(a)
MAIN SCANNING DIRECTION
8
4
2
4
8
4
2
1
2
4
2
1
(b)

FIG. 9



US6606408B1

FIG. 10

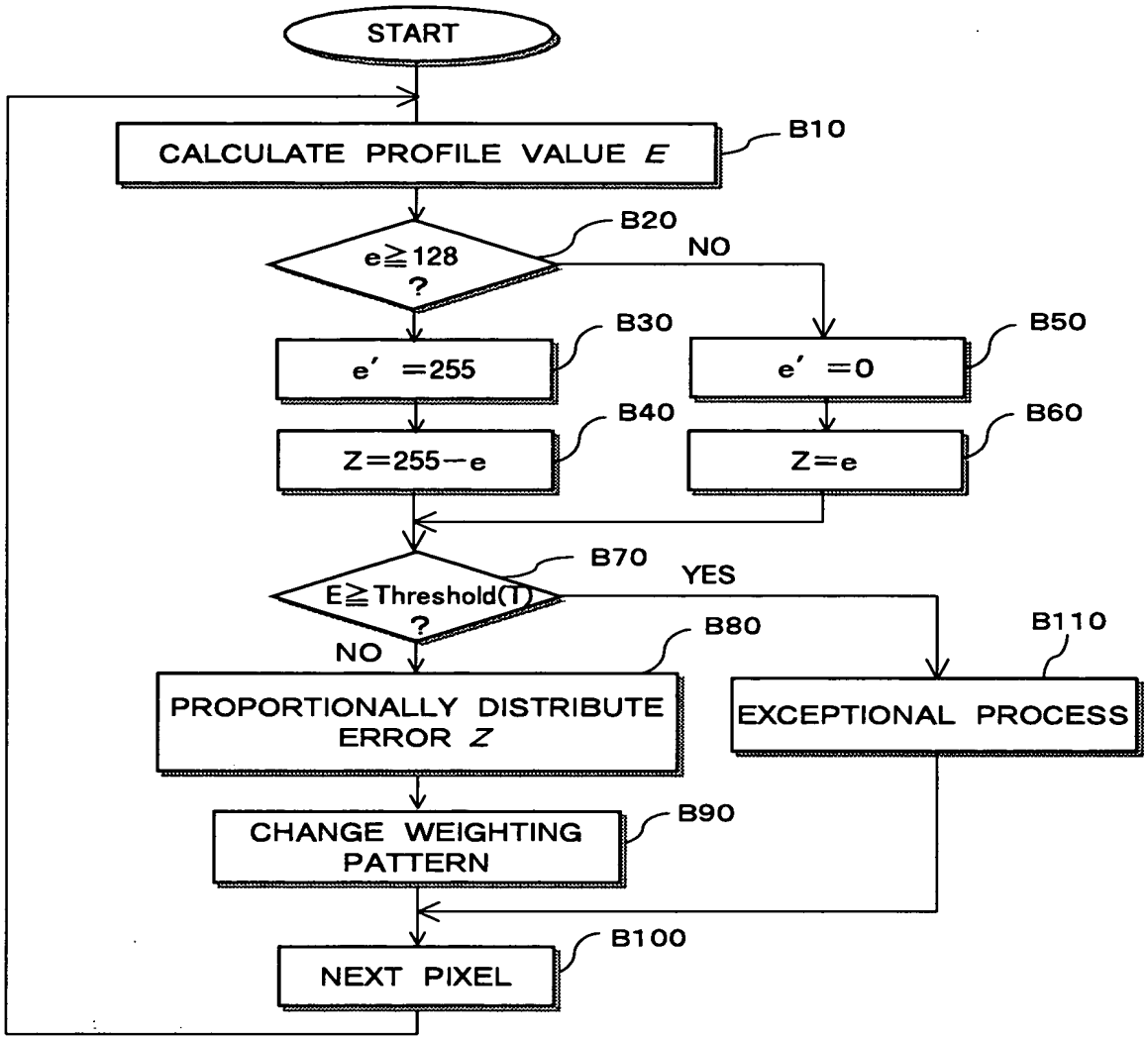
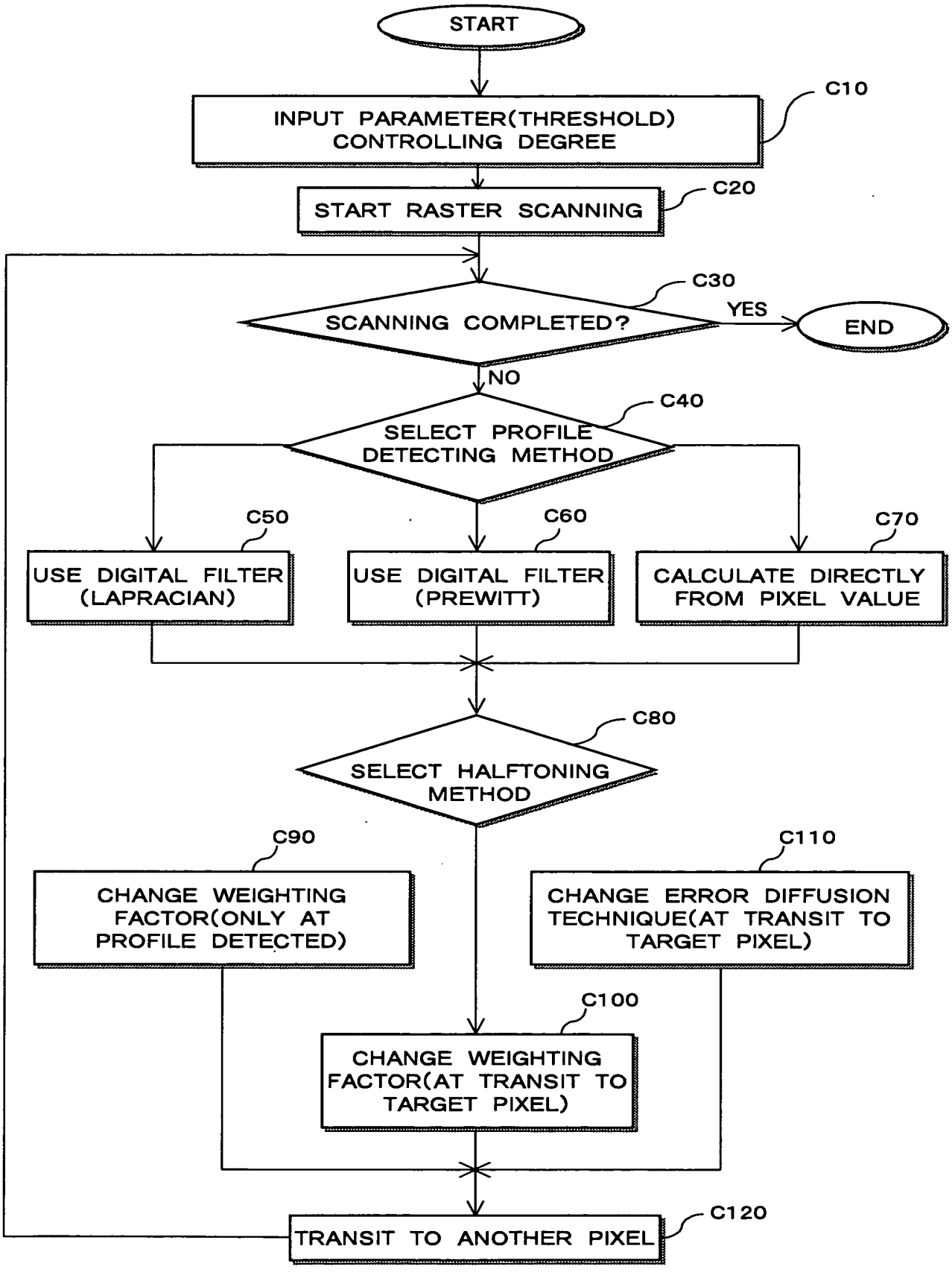
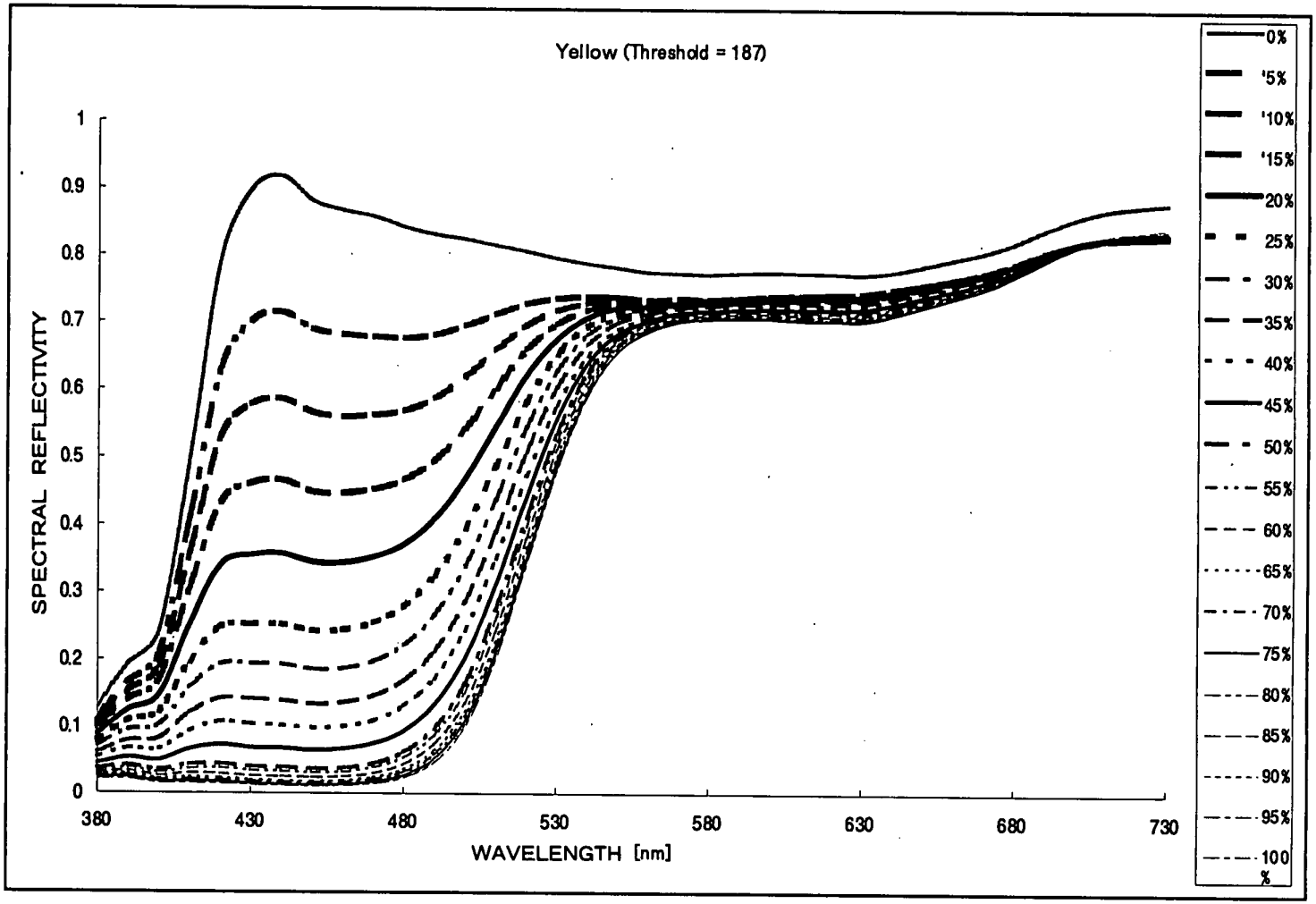

START
CALCULATE PROFILE VALUE E
B10
e≧128 ?
B20
NO
e′ =255
B30
e′ =0
B50
Z=255−e
B40
Z=e
B60
E≧Threshold(T) ?
B70
YES
NO
PROPORTIONALLY DISTRIBUTE ERROR Z
B80
EXCEPTIONAL PROCESS
B110
CHANGE WEIGHTING PATTERN
B90
NEXT PIXEL
B100

FIG. 11



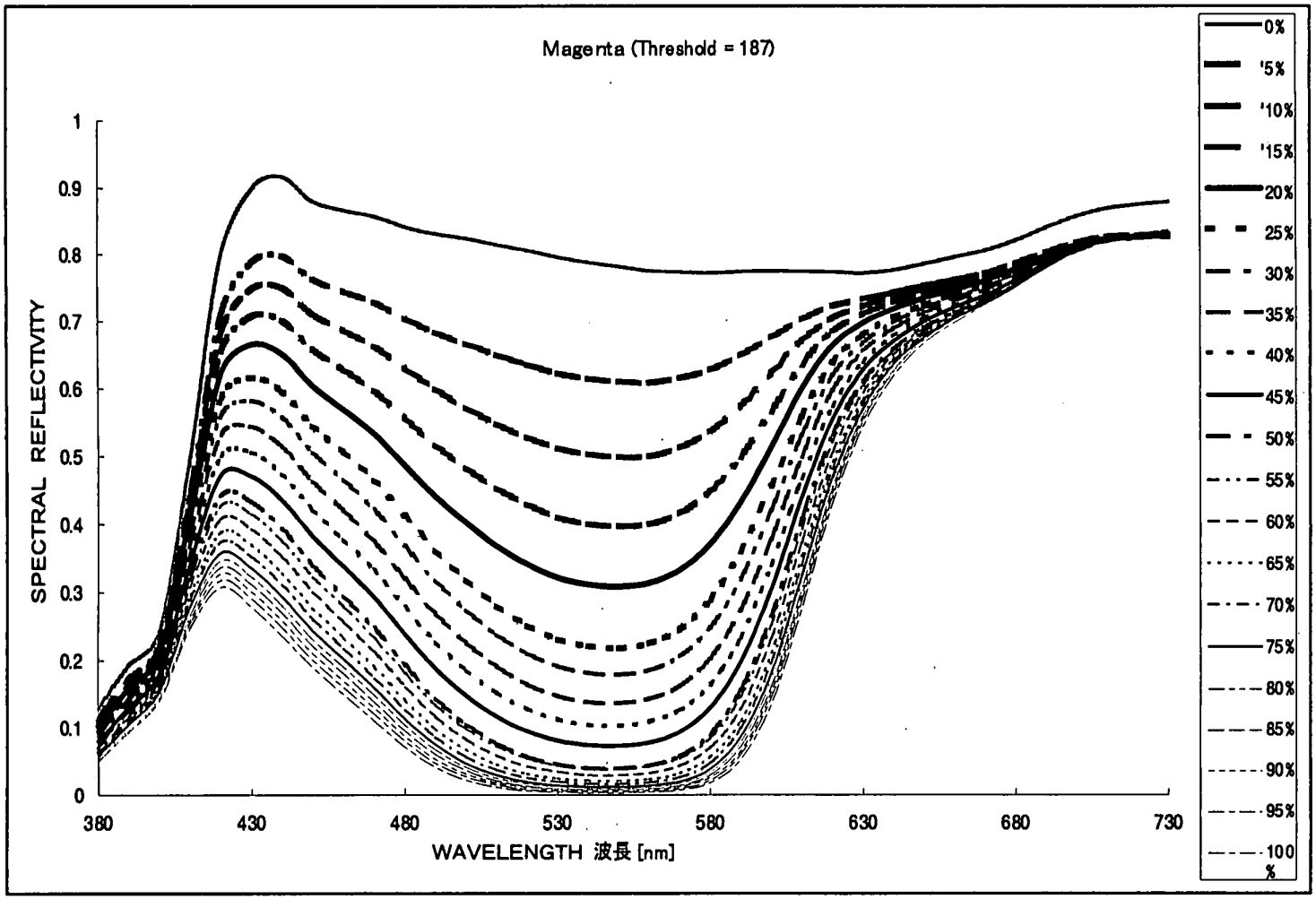
0000-0000-0000-0000

FIG. 12



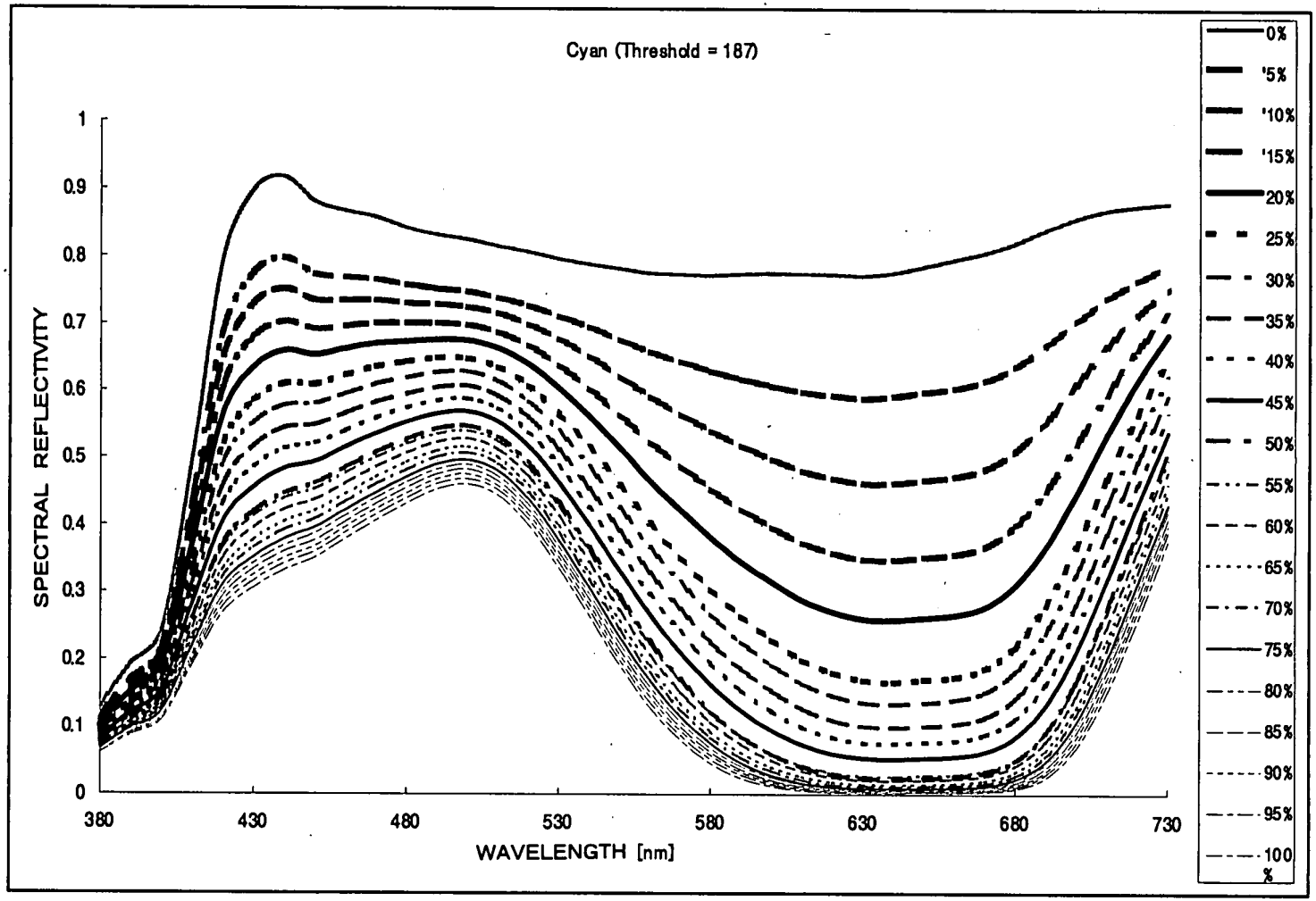
09667439 .092200

FIG. 13



09667439 .092200

FIG. 14



09667439.092200